

Telephone:
Fax:
VAT Registration No.:

Name:		Manufacturer:	Isuzu
Address:		Model:	
		Year:	
		Registration:	
Tel - Private:		Mileage:	
Tel - Business:		Job number:	

Vehicle identification				
Notes			Specified value	Measured value
	No. of cylinders	Type	4/OHV	
	Capacity	cc	2771	
	Compression ratio	:1	17,5	
Injection system				
Notes			Specified value	Measured value
	Injection pump assembly	Make	Bosch	
	Injection pump assembly	Part No.	9 460 610 315/6	
	Injection pump assembly	Part No.	9 460 610 367	
	Pump type		Rotary	
	Feed pump delivery pressure	bar	0,2	
	Injection sequence		1-3-4-2	
	Injection nozzle	Make	Bosch	
	Nozzle and holder assembly	Part No.	9 430 610 062	
	Nozzle opening pressure - new/used	bar	166-176	
Tuning and emissions				
Notes			Specified value	Measured value
	Plunger travel (pump)	mm ABDC	0,5	
	Crankshaft position	°BTDC	10	
	Adjusting method	Engine/Pump	Pointer/ Dial gauge	
	Idle speed	rpm	750-790	
	Idle speed - alternative	rpm	AC=900	
	Rated no load speed	rpm	4700	
	Oil temperature	°C	80	
	Idle speed - for smoke test	rpm	750-790 AC=900	
	Governed speed range - for smoke test	rpm	4400-4800	

Manufacturer: Isuzu
Engine code: 4JB1T
Tuned for:

Model: Trooper 2,8D Turbo
Output: 71 (97) 3700
Year: 1988-92

© Autodata Limited 2004
06-10-21
V5.373- ***/Autodata***

	maximum time at governed speed	secs	1,0	
	Test mode	A/B	B	
	Probe type	1/2	1	
	Conditioning	Accelerations/rpm	5-8	
	Smoke opacity - EU limit	m-1 (%)	3,00 (73)	
Starting and charging				
Notes			Specified value	Measured value
	Battery	V/RC(Ah)	12 (100) /170	
	Starter motor	Type	2,2 kW	
	Maximum cranking amps	A	460-566	
	Alternator	Type	12V 50A	
	Alternator output	A/V/rpm	45/12/2500	
Glow plugs				
Notes			Specified value	Measured value
	Glow plug nominal rating	V/A	5/11	
	Glow plug activation time	secs	20 Max	
	Glow plug - part no.	Bosch	0 250 202 065	
Service checks and adjustments				
Notes			Specified value	Measured value
	Valve clearance - INLET	mm	0,40 cold	
	Valve clearance - EXHAUST	mm	0,40 cold	
	Compression pressure	bar	21,0-30,0	
	Oil pressure	bar/rpm	3,9/-	
	Radiator cap	bar	0,9-1,2	
	Thermostat (primary/secondary) open	°C	82	
	Drive belt tension - alternator/PAS/AC	mm	10	
Lubricants and capacities				
Notes			Specified value	Measured value
	Engine oil grade - cold climate	SAE	5W/30	
	Engine oil grade - moderate climate	SAE	10W/30	
	Engine oil grade - hot climate	SAE	20W/50	
	Engine oil classification	API/ACEA	CF/B2-96	
	Engine oil grade - alternative - moderate climate	SAE	15W/40	
	Engine oil classification - alternative - moderate climate	API/ACEA	CF/B2-96	
	Engine with filter	litres	5,5	
	Gearbox oil grade	SAE	10W/30	
	Gearbox 4/5 speed	litres	2,9	
	Differential front/AT	litres	1,5	
	Differential oil grade - rear	SAE	80W/90	
	Differential rear	litres	1,8	
	Cooling system	litres	10,3	
	Brake fluid	Type	DOT 3/4	
	Power steering fluid	Type	Dexron III	
Tightening torques				
Notes			Specified value	Measured value
	Cylinder head instructions			
Cylinder head				
		Renew bolts	No	

Manufacturer: Isuzu
Engine code: 4JB1T
Tuned for:

Model: Trooper 2,8D Turbo
Output: 71 (97) 3700
Year: 1988-92

© Autodata Limited 2004
06-10-21

V5.373- **/Autodata**

	Stage 1	Tighten	44-54 Nm	
	Stage 2	Tighten	120°-150°	
Other tightening torques				
	Main bearings	Renew bolts/nuts	No	
	Main bearings	Stage 1	85 Nm	
	Main bearings	Stage 2	157-176 Nm	
	Big end bearings	Renew bolts/nuts	No	
	Big end bearings	Stage 1	40 Nm	
	Big end bearings	Stage 2	78-88 Nm	
	Sump drain bolt		63-82 Nm	
	Flywheel/driveplate		113-122 Nm	
	Clutch to flywheel		16-20 Nm	
	Crankshaft pulley/damper		167-205 Nm	
4	Camshaft sprocket/gear			
	Camshaft/rocker cover		8-18 Nm	
	Inlet manifold to cylinder head		14-23 Nm	
	Exhaust manifold to cylinder head		14-23 Nm	
	Injector/clamp		31-43 Nm	
	Injector pipe unions		20-40 Nm	
	Injection pump sprocket/gear		59-69 Nm	
	Injection pump flange		10-20 Nm	
	Injection pump mounting		10-20 Nm	
	Injection nozzle to holder		29-39 Nm	
	Glow plugs		20-24 Nm	
	Steering track rod end		98 Nm	
	Brake caliper to carrier	Front	32 Nm	
	Brake caliper carrier to hub	Front	155 Nm	
	Brake caliper to carrier	Rear	20 Nm	
	Brake caliper carrier to hub	Rear	104 Nm	
2	Road wheels		78-118 Nm	
Brake disc and drum dimensions				
Notes			Specified value	Measured value
	Minimum disc thickness - ventilated	Front	20,6 mm	
	Disc thickness variation	Front	0,015 mm	
	Disc runout	Front	0,13 mm	
	Maximum drum diameter	Rear	255,5 mm	
	Minimum pad thickness	Front	1 mm	
	Minimum shoe thickness	Rear	1 mm	
	Handbrake travel	No. of notches	12-14	
Air conditioning				
Notes			Specified value	Measured value
	Air conditioning refrigerant	Type	R12	
	Air conditioning refrigerant quantity	grams	950	
	Air conditioning oil	Type	Freol DS-83P	
	Air conditioning oil quantity	cm ³	150	

Autodata Note 4

A = 19 Nm

Manufacturer: Isuzu
Engine code: 4JB1T
Tuned for:

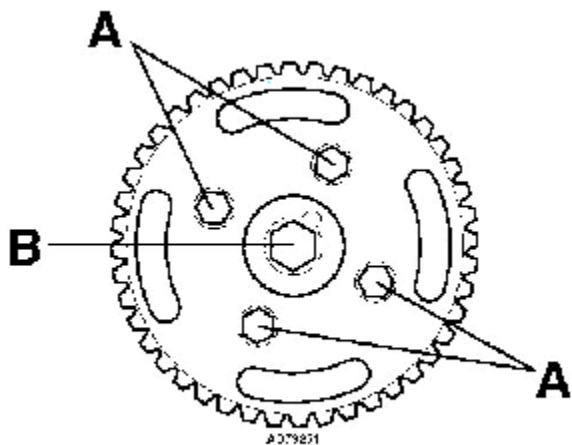
Model: Trooper 2,8D Turbo
Output: 71 (97) 3700
Year: 1988-92

© Autodata Limited 2004
06-10-21
V5.373- **/Autodata**

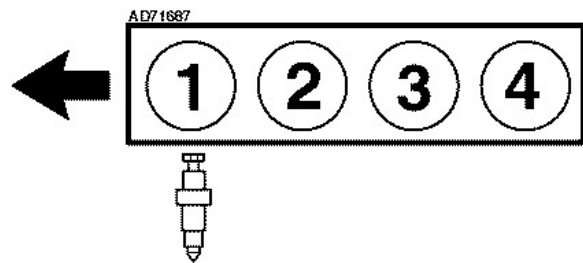
Autodata Note 2

Alu = 118-127 Nm

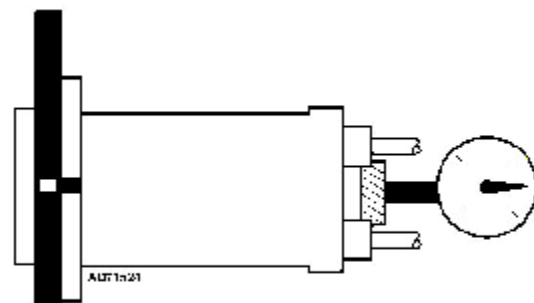
79251



Cylinder layout



Injection pump timing

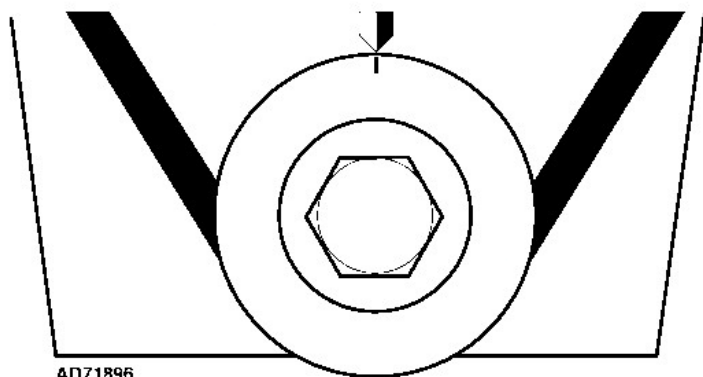


Manufacturer: Isuzu
Engine code: 4JB1T
Tuned for:

Model: Trooper 2,8D Turbo
Output: 71 (97) 3700
Year: 1988-92

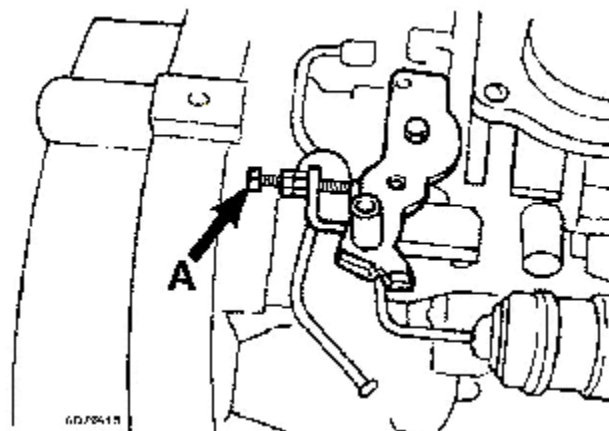
© Autodata Limited 2004
06-10-21
V5.373- **/Autodata**

Crankshaft position/Piston position

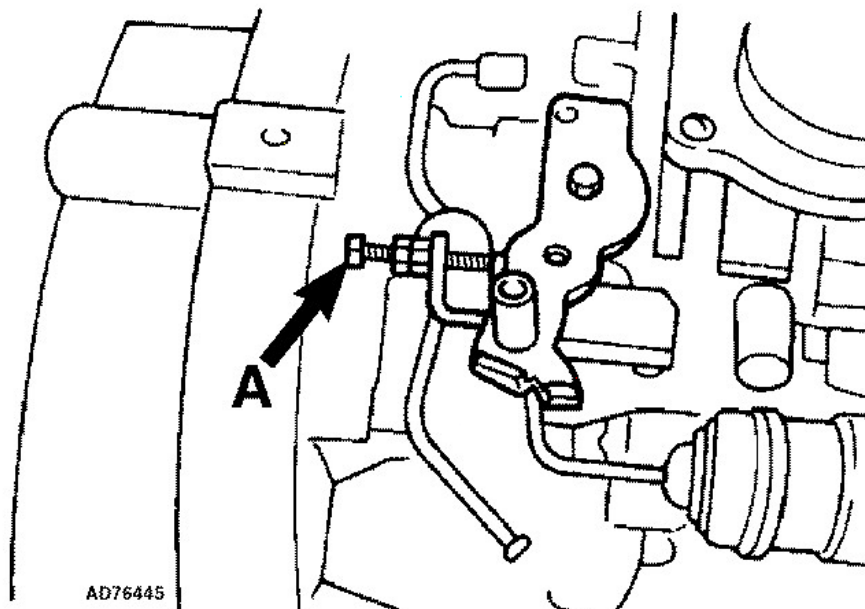


AD71896

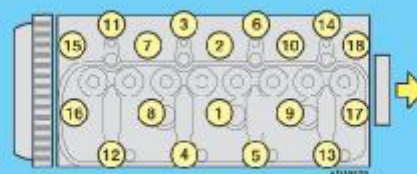
Idle speed adjustment (A)



Idle speed adjustment (A)



Tightening sequence



Manufacturer: Isuzu
Engine code: 4JB1T
Tuned for:

Model: Trooper 2,8D Turbo
Output: 71 (97) 3700
Year: 1988-92

© Autodata Limited 2004
06-10-21
V5.373- **/Autodata**